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TITLE: Optical properties of ZnO/GaN heterostructure and its
near-ultraviolet **light-emitting**
diode
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AB **Luminescence** in a ZnO/GaN heterostructure is reported, which
showed a donor-acceptor pair emission band at 3.270 eV and the LO phonon
replicas at 12 K. In comparison with p-type GaN, the positions of the
peaks are red shifted. This may be associated with the variation of the
residual strain in the GaN layer of the heterostructure. Using this
heterostructure, near-UV **LEDs** were fabricated, and their
electroluminescence properties were characterized.

IT 1314-13-2, Zinc oxide, properties
RL: DEV (Device component use); PEP (Physical, engineering or chemical
process); PRP (Properties); PYP (Physical process); PROC (Process); USES
(Uses)
(**luminescence** and near-UV **LED** of gallium nitride
heterostructure with)

RN 1314-13-2 CAPLUS
CN Zinc oxide (ZnO) (9CI) (CA INDEX NAME)

O==Zn

IT 7439-95-4, Magnesium, properties
RL: DEV (Device component use); MOA (Modifier or additive use);
PEP (Physical, engineering or chemical process); PRP (Properties); PYP
(Physical process); PROC (Process); USES (Uses)
(**luminescence** and near-UV **LED** of gallium
nitride/zinc oxide heterostructure doped with)

RN 7439-95-4 CAPLUS
CN Magnesium (8CI, 9CI) (CA INDEX NAME)

Mg

IT 25617-97-4, Gallium nitride
RL: DEV (Device component use); PEP (Physical, engineering or chemical
process); PRP (Properties); PYP (Physical process); PROC (Process); USES
(Uses)
(**luminescence** and near-UV **LED** of zinc oxide